

**PUBLIC NOTICE**  
**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**  
**The Village of Tupper Lake Has Levels of**  
**Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s)**  
**Above Drinking Water Standards**

Our water system has violated a drinking water standard. Although this is not an emergency, as our consumers, you have a right to know what happened and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results from 2018 and 2019 show that our system exceeded the standard, or maximum contaminant level (MCL), for Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) based on samples collected at one location. The MCL for TTHMs is 80 parts per billion (ppb). The MCL for HAA5s is 60 parts per billion (ppb). Our compliance is determined by averaging the 4 most recent samples collected on a quarterly basis at each sampling location (166 Main Street, the Village Office, and a new site at the NYS Route 30 DEC Boat Launch). This is called a locational running annual average (LRAA). The TTHM and HAA5 LRAA concentrations at the 166 Main Street sampling site and the Village Office are now below the MCL level and no violation exists at these sites. This is due to putting the new groundwater wells on line and taking the Tupper Lake surface water source off-line. We anticipate LRAA values for TTHM and HAA5s to continue to drop at both sampling locations over the next few quarters.

A new sampling location has been established near the NYS Route 30 DEC Boat Launch, and after 4 quarters of sampling, the LRAA for both TTHMs and HAA5 has been calculated. **The MCL for TTHMs and HAA5s was exceeded at the NYS Route 30 DEC Boat Launch sampling site.** The TTHM LRAA calculated for the 3<sup>rd</sup> quarter of 2019 was 131.8 ppb and the HAA5s LLRA calculated for the 3<sup>rd</sup> quarter of 2019 was 102.0 ppb.

**What are Trihalomethanes?**

Trihalomethanes are a group of chemicals that are formed in drinking water during disinfection when chlorine reacts with naturally occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. They are disinfection byproducts and include the individual chemicals chloroform, bromoform, bromodichloromethane, and chlorodibromomethane. The amount of trihalomethanes formed in drinking water during disinfection can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors.

Disinfection of drinking water by chlorination is beneficial to public health. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses, and chlorine is the most commonly used disinfectant in New York State. All public water systems that use chlorine as a disinfectant contain trihalomethanes to some degree.

**What are the health effects of Trihalomethanes?**

Some studies suggest that people who drank water containing trihalomethanes for long periods of time (e.g., 20 to 30 years) have an increased risk of certain health effects. These include an increased risk for cancer and for low birth weights, miscarriages and birth defects. The methods used by these studies could not rule out the role of other factors that could have resulted in the observed increased risks. In addition, other similar studies do not show an increased risk for these health effects. Therefore, the evidence from these studies is not strong enough to conclude that trihalomethanes were a major factor contributing to the observed increased risks for these health effects. Studies of laboratory animals show that some trihalomethanes can cause cancer and adverse reproductive and developmental effects, but at exposures much higher than exposures that could result through normal use of the water. The United States Environmental Protection Agency reviewed the information from the human and animal studies and concluded that while there is no causal link between disinfection byproducts (including trihalomethanes) and human health effects, the balance of the information warranted stronger regulations that limit the amount of trihalomethanes in drinking water, while still allowing for adequate disinfection. The risks for adverse health effects from trihalomethanes in drinking water are small compared to the risks for illness from drinking inadequately disinfected water.

**What are Haloacetic Acids (HAAs)?**

HAAs are formed in drinking water during treatment by chlorine (the most commonly used disinfectant in New York State), which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae, or other aquatic plants) in surface water sources such as rivers and lakes. The amount of HAAs in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies suggest that people who drank chlorinated drinking water containing disinfection by-products (possibly including HAAs) for long periods of time (e.g., 20 to 30 years) have an increased risk for certain health effects. These include an increased risk for cancer. However, how long and how frequently people actually drank the water as well as how much HAAs the water contained is not known for certain. Therefore, the evidence from these studies is not strong enough to conclude that the observed increased risk for cancer is due to HAAs, other disinfection by-products, or some other factor. Studies of laboratory animals show that the individual HAAs, dichloroacetic acid and trichloroacetic acid, can cause cancer following exposure to high levels over their lifetimes. Dichloroacetic acid and trichloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, and nervous system and on their ability to bear healthy offspring. The effects reported in studies of laboratory animals occur at exposures much higher than exposures that could result through normal use of the water. The risks for adverse health effects from HAAs in drinking water are small compared to the risk for illness from drinking inadequately disinfected water.

**What does this mean for you?**

At present, the water is suitable to drink, cook with, and bath in. Some people may wish to take additional practical measures to reduce their exposure. We do not consider these measures necessary to avoid health effects, but they are provided as options. These include using bottled water for drinking and cooking purposes or using water pitchers containing an activated carbon filter or a tap-mounted activated carbon filter. These filters are readily available in many grocery and home improvement stores. Ventilating bathroom areas (e.g., using exhaust fans or opening windows) when showering or bathing can also help reduce exposures from chemicals released into the air.

**What happened? What is being done?**

The Village of Tupper Lake had two surface sources of water, Little Simond Pond and Tupper Lake. The Village operated water filtration plants at both source water locations and treats the water with chlorine disinfection. Surface water sources contain naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) which can form TTHMs and HAA5s when the water is disinfected with chlorine.

The new drinking water wells helped to reduce TTHM and HAA5 formation in a large portion of our distribution system; however, since the Little Simond Pond filtration plant is still operational, TTHM and HAA5 formation is still an issue in the southern portion of the distribution system. The Town is currently working with its Engineer and the DOH to come up with system modification options to address this issue. For more information, please contact the Village Office at 359-3341.

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This Notice is being sent to you by the Village of Tupper Lake.

State Water System ID#: NY1600012

Date distributed: November 22, 2019